Name: Homework 7

*Ms. Estrada, Mr. Bielmeier, Mr. Tiénou-Gustafson*

Geometry, Period

Due Date:

**H. Geometry**

**Homeworkk**



**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

|  |  |
| --- | --- |
| 1. Which multiple choice option describes the correct transformation to the parent graph ()?    A. Shrink and shift down 2 units  B. Stretch and shift down 2 units  C. Stretch and reflection across the x-axis  D. Shrink, shift down 2 units, and reflection  across the x-axis  E. Shrink and reflection across the x-axis | 2. How would the graph of the function y = x2 + 2 affected if the function were changed to y = x2 – 5?  A. The graph would shift 5 units up.  B. The graph would shift 5 units down.  C. The graph would shift 7 units down.  D. The graph would shift 7 units to the right.  E. The graph would shift 2 units down. |
| 3. Describe the transformation of y = x2  + 1 to the parent function. | 4. How would the graph of the function  y = x2 – 1 affected if the function were changed to  y = 2x2 – 4? |
| 5) Describe why the transformation of a parabola vertically stretches when |a| > 0. | 6) Describe why the transformation of a parabola vertically compresses (shrinks) when 0 < |a| < 1. |
| 7) Describe the transformation of y = x2 – 2 to the parent function. | 8) How would the graph of the function  y = x2 + 4 affected if the function were changed to  y = x2+ 7? |

Solve the equation. A. How many solutions are there? B. Find the ***vertex*** and C. Find the ***axis of symmetry***!

|  |  |  |
| --- | --- | --- |
| 1)  A.  B.  C. | 2)  A.  B.  C. | 3)  A.  B.  C. |
| 4) Use the graph below to find the solutions of the given equation. | 5) Use the graph below to find the solutions of the given equation. | 6) Use the graph below to find the solutions of the given equation. |
| 7) Find the zeros of the functions by graphing. | 8) Find the zeros of the functions by graphing. | 9) The graph  is shown below. How many solutions does this quadratic equation have?     1. 0 2. 1 3. 2 4. 3 |
| 10) What are the different names used to find the “answer” for a quadratic equation? | | |